Pipette suction for atraumatic extraction of intraventricular cysticercosis cysts

Technical note

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The authors use a slender Pasteur pipette for the atraumatic extraction of Cysticercus cysts from the deep ventricular cavities. Their technique is described and illustrated.

KEY WORDS • Cysticercus cyst • atraumatic pipette • intraventricular cyst

In Mexico, cysticercosis is an endemic disease found in 9% of all neurological patients. This disease is a serious neurosurgical problem when it is found in the ventricular system. Cysticercus cysts in the fourth ventricle can be evacuated easily by separating the cerebellum tonsils and irrigating the area with saline solution.

When these cysts are located in the lateral ventricle or in the third ventricle, they should be pulled out with a forceps or with a suction tube. This frequently causes rupture of the cyst, and the intraventricular liberation of its contents, producing an irritative encephalopathy that can be fatal. On our service, we have found it easy to extract these cysts with the use of a Pasteur pipette (Fig. 1).

The advantages of this method are the following: 1) The pipette is 23 cm long, and 0.01 cm in diameter.

![Fig. 1. Pasteur's pipette.](image1)

![Fig. 2. Conray ventriculography showing the two intraventricular (right lateral and third ventricle) Cysticercus cysts.](image2)
This permits its passage through small spaces, such as a tiny cortical opening or the foramen of Monro, to reach the cysts. 2) It produces gentle suction, sufficient to engage the cyst wall firmly but not strong enough to break it. This suction can be regulated by a small suction bulb at the tip of the pipe.

The case of a 16-year-old patient with two Cystercercus cysts illustrates the use of this method. This patient had one cyst in the right lateral ventricle, and another in the third ventricle, obstructing the foramen of Monro (Fig. 2). The cysts were extracted through a small right frontal corticotomy and through the foramen of Monro, by means of the technique described above (Fig. 3).

Reference


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